

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Method for increasing seed yield of a plant compared to corresponding control wild-type plants, comprising modulating expression in a plant of an isolated nucleic acid sequence encoding a TAD protein, ~~or a homologue, derivative~~ or active fragment thereof wherein said TAD protein or active fragment thereof comprises an ATPase domain having at least 70% sequence identity to SEQ ID NO:2, and/or modulating activity of a TAD protein or active fragment thereof wherein said TAD protein or active fragment thereof comprises an ATPase domain having at least 70% sequence identity to SEQ ID NO:2.

wherein said plant has increased seed yield ~~a homologue, derivative or active fragment thereof.~~

2. (Original) Method according to claim 1, wherein said modulation is effected by recombinant means and/or chemical means.

3. (Currently Amended) Method according to claim 1, wherein said modulating expression comprises introducing into a plant a nucleic acid sequence encoding said TAD protein or active fragment thereof ~~a TAD protein or a homologue, derivative or active fragment thereof.~~

4. (Previously Presented) Method according to claim 1, wherein said increased yield comprises increased seed yield.

5. (Original) Method of claim 4, wherein said increased seed yield comprises at least an increase in the number of filled seeds.

6. (Original) Method of claim 4, wherein said increased seed yield comprises at least an increase in total seed weight.

7. (Original) Method of claim 4, wherein said increased seed yield comprises at least an increase in Harvest Index.

8. (Currently Amended) Method of claim 1, wherein said nucleic acid sequence encoding a TAD protein or active fragment thereof is derived from a plant.

9. (Currently Amended) Method according to claim 1, wherein said modulated expression is overexpression compared to corresponding control wild-type plants.

Claims 10-11. (Canceled)

12. (Currently Amended) Method for the production of a transgenic plant having increased seed yield compared to corresponding control wild-type plants, which method comprises:

a[.]] introducing into a plant or plant cell a nucleic acid sequence or a portion thereof encoding a TAD protein ~~or a homologue, derivative or~~ active fragment thereof wherein said TAD protein or active fragment thereof comprises an ATPase domain having at least 70% sequence identity to SEQ ID NO:2;

b[.]] cultivating the plant cell under conditions promoting regeneration and mature plant growth.

Claims 13-20. (Canceled)

21. (new) Method for increasing seed yield of a plant compared to corresponding control plants by introducing an expression cassette comprising a nucleic acid sequence encoding a polypeptide of SEQ ID NO:2, wherein said plant has increased seed yield.